DOCUMENT RESUME

ED 374 758 HE 027 765

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TITLE The Measurement of Charismatic Teaching in the College Classroom.
PUB DATE 4 Apr 94
NOTE 49p.; Paper presented at the Annual Meeting of the American Educational Research Association (New Orleans, LA, April 4, 1994).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS College Faculty; *College Instruction; Factor Analysis; Higher Education; Interviews; *Measurement Techniques; *Merit Rating; Professional Recognition; Questionnaires; *Student Attitudes; *Student Evaluation of Teacher Performance; Teacher Attitudes; Teacher Behavior; *Teacher Characteristics
IDENTIFIERS *Charisma

ABSTRACT

This study identified the characteristics of charismatic teaching behavior by interviewing deans, department chairs, teachers, and students at a midwestern state university. Based on interview data, a questionnaire was developed and administered to 19 classes, 10 taught by teachers recognized by the university for teaching merit and 9 teachers not so recognized. Results indicated that charismatic teachers were perceived as exhibiting caring and concern for students and were seen as energetic and enthusiastic in the classroom. There may be two opposing kinds of charismatic teaching, one focused on intellectual aspects, the other on personal or relational attributes. There was a positive relationship between teachers recognized for merit and teachers viewed as being charismatic. The relationship among: (1) personal empathy, personal intensity, and intellectual challenge as factors of charismatic leadership, (2) trust, and (3) commitment were also analyzed by ethnicity of student, sex of student, age of student, sex of teacher, and subject being taught. (Contains 22 references.) (JDD)

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ED 374 758

The Measurement of Charismatic Teaching in the College Classroom[1]

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Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA. April 4, 1994.

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The Measurement of Charismatic Teaching in the College Classroom

The various teaching activities in which a teacher engages imply a leadership role. Yet, teaching is not often studied from a leadership perspective. There have been exceptions to this trend, however. Dunham (1965) and Swanson (1974) argue that teacher behavior may be treated in the same way as leadership behavior, but provide no empirical support.

Dawson, Messe & Phillips (1972), after demonstrating the positive effects of Consideration and Initiating Structure on performance, argue that teacher behavior can be investigated as leader behavior. This conclusion was essentially supported by Lahat-Mandelbaum & Kipnis (1973) and Norr and Crittenden (1975), though the latter warned against a one-to-one correlation between the teaching and leadership. More recent approaches to teaching as organizational leadership include Peterson & Cooke (1983) and Morrison (1985).

The approach to leadership that I will explore in this paper, one which seems virtually absent from the empirical literature, is the teacher as a charismatic leader of students in the classroom. The focus here is on the leader as a transmitter of inspiration, or as Tichy and Devanna (1986, p. 29) put it, "creator of a motivating vision."

Charismatic Leadership

In his theory of charismatic leadership, House (1977) identifies the following defining characteristics:

(a) they display high self-confidence,

(b) they demonstrate strong conviction in their own ideals and beliefs, and

(c) they show a strong need to influence people (i.e., need for power).

These result in:

(a) extraordinary trust in the leader by followers,

(b) acceptance of leader's value system,

(c) heightened performance goals of followers.

In an exploratory study of charismatic leadership in business, Conger (1985) found that charismatic leadership was perceived as having a scalar quality and that charismatic leaders could be differentiated from noncharismatic leaders by specific distinguishing attributes, especially, vision, inspiration and the ability to excite. In a later theoretical work Conger and Kanungo (1987) note that there appears also to be general agreement that charisma is not a personality characteristic. Rather, it is a perception of followers derived from an interaction of leader's attributes and the needs, beliefs, values and perceptions of his/her followers.

Charismatic teaching--Research questions

Although the theories of charismatic leadership cited above were derived with regard to formal organizations, as with other leadership theories, application to teacher behavior seems appropriate. In order to do so, one must take into account the differences between the business and teaching environments, and between the roles of teaching and organizational management.[2]

Another assumption of this study is that charismatic teaching, like charismatic leadership, is measurable, and is based on perceptions of students. Many classroom researchers (see, for example, Ames,1992) have concluded that the perceptions of students mediate the effects of the teacher's behavior. Therefore, charismatic teaching may be usefully viewed as a product of the student's perceptions as much as the teacher's behavior. The question therefore arises: What perceptions do students have of the teachers they consider to be charismatic.

House (1977) suggests that followers show increased trust in, and increased commitment toward the leader, and adopt the leader's values. Conger (1988) and Bass (1988) also identify motivation and productivity as areas in which follower effects can be identified. When charismatic behavior is examined with respect to teaching, the question of student effects becomes germaine, and the effects identified in followers likewise should be present among students of charismatic teachers. A second research question, therefore, is: What student responses are

associated with charismatic teaching? And specifically, to what degree are trust in the teacher and commitment to classroom goals related to the teacher's charisma?

Another important element of charismatic behavior as it relates to teaching is that these behaviors, though they may enhance effective instruction, may also coexist with ineffective teaching behaviors. An obvious example of this would be the teacher who is exciting to listen to and engaging in personal characteristics, but who transmits inaccurate information in the classroom. When this happens, the effects on students may be inimical to their education. Yet, according to Howell (1988), charismatic behavior creates "favorable perceptions on the part of followers" and fosters "their receptivity toward the charismatic image"(p. 222). Other researchers (For example, Ware & Williams,1975) note the disproportionate influence of expressiveness on the student ratings. This could result in charismatic teachers being more likely to be recognized for excellence than other competent teachers--recognition being a function of charisma as much as competence. Thus, a third research question arises: What relationsip exists between the presence of these charismatic behaviors in teachers and their honorific recognition?

Implications

The study of charisma in teaching is important for both thecretical and practical reasons. If, as is being proposed

here, charismatic teaching exists as a phenomenon, it is important to determine, if only for theoretical interest, the nature of this phenomenon, its properties and its relationships. In doing so, the general understanding of the teacher-student relationship would be enhanced. However, the primary task would be to devise a means of measuring charismatic teaching. This is what is addressed here.

In the measurement of charismatic teaching, it is also important to determine whether it consists of simply a set of objective behaviors or whether it is a set of personality characteristics native to the teacher. If charisma is merely a set of behaviors, and if its effects are entirely salutary, then these behaviors can be taught and the education of teachers can therefore be enhanced by this study.

If, however, charismatic teaching is tied to native personality, we may be unable to teach charisma. If the effects are not entirely beneficial, we may desire to avoid them. Yet even in these cases, an understanding of charismatic teaching allows us the ability to account for a larger portion of the mix of factors which have an effect on the classroom environment, and allows facility to decision makers in making selection decisions in the profession.

General Method

This study had two major objectives and will be reported in two parts. The purpose of the first part was to identify the characteristics of charismatic teaching behavior, develop a measure of charismatic teaching and determine its psychometric qualities. In addition to the development of the instrument, a qualitative analysis of the interview data was performed. Second, the measure was used to determine the relationship of charismatic teaching to various teacher and student variables.

Part I

Method--Instrument development

The identification of teacher characteristics and the development of the instrument proceeded in the following steps.

1. Deans and department chairs were interviewed. These persons were asked to identify the distinctive behaviors of teachers who are considered charismatic.

2. Other teachers, not necessarily identified as charismatic, were interviewed and asked to identify the same behaviors which they observe in their charismatic colleagues.

3. Finally, students were interviewed and asked to (a) identify the same behaviors as above, and (b) indicate their responses to and perceptions of such teachers.

Subjects

The interviewees consisted of ten (10) faculty members (8 male and 2 female) and twenty-five (25) students (7 male and 18

female) at a midwestern state university. The faculty members represented a wide range of subject areas in colleges of arts and sciences and applied science and technology, including the two college deans. The students were volunteers from the university's psychology subject pool. Although the pool comprised students taking a course in psychology, the students in the sample represented a wide range of major areas spanning the colleges of Arts and Sciences, Applied Science and Technology, Business and Education.

The interview

The interviews were open ended to allow for the fullest exploration of the behaviors characteristic of charismatic teaching. It was assumed that these behaviors would be of relatively high inference. The faculty interviewees were asked to focus on fellow teachers whom they perceived to be charismatic. They were asked to describe their teaching behavior, attitude to students and their subject, and the response of students to their teaching.

The students were asked similar questions about their experience with charismatic teachers. Since the term "charismatic" was not aways understood by some students, they were asked about teachers who, irrespective of their teaching ability, "are attractive, that is, are the sort whom students seem to be drawn towards".

The following procedure was then followed:

1. The interviews were recorded by audiotape and the transcripts and specific characteristics of teachers perceived as charismatic were identified.
2. These characteristics were placed into categories.
3. Descriptive phrases were developed to capture the essence of the various categories.
4. These phrases were checked for reliability by having ten independent coders place them into categories obtained above. Agreement of seven of ten coders was required for each item to be confirmed in a category. Otherwise, the phrase was rewritten or discarded.
5. Questionnaire items were written based on these phrases.

Results and Discussion

Qualitative analysis from interview data

The following observations summarize the perceptions of teachers and students as reported in the interviews.[3]

First, there seemed to be a rather high level of agreement between the responses of faculty members and of students. Second, some students as well as faculty suggested two kinds of charisma. The dichotomy was in some cases between the genuinely charismatic teacher and the charlatan. In this case, the charlatan was seen as someone who attracted students, but failed to deliver a credible classroom product. Another dichotomy identified was one between a teacher whose attraction was based

on sheer intellectual prowess, and one whose charisma was based on personal integrity and caring. This distinction was more often made by teachers.

A third pattern was the tendency to identify charismatic teaching with excellent teaching. Although the interviewer took pains to separate the concept of charisma from that of teacher competence, several persons insisted that they saw no distinction between charismatic teaching and excellent teaching. Caring about the student was not only the most often cited characteristic, it was usually the first cited. This was somewhat surprising since other literature on charisma seemed to focus on energy and enthusiasm as dominant characteristics. These were present but faculty seemed to value caring more. Students seemed to value energy and enthusiasm more than did faculty, though caring was still a very important factor. Indeed, enthusiasm and energy seemed for students at times to be subsumed under caring.

A fifth and also surprising trend is one for which much more evidence is required. An apparent ethnic factor seemed to be present. There were only two African-american students in the sample. Both responded initially that they had no experience with a charismatic teacher. These were the only students who responded in this way.

Also requiring more evidence is the suggestion that the perception of charismatic teaching may be influenced by the subject taught. On two instances, a student suggested this

possible effect. In both these instances, a mathematical subject was thought to be less conducive to charismatic teaching. This suggests a distinction between subjects which are typified by ill-defined problems and those typified by well-defined problems (Glover, Ronning & Bruning, 1990). In the former (e.g. arts and humanities), the subjects are characterized by imprecision and require greater creativity on the part of the problem solver (presumably the teacher in this case).

The latter category is characterized by subjects in which the problems have clear-cut solutions. "Many arithmetic, mathematics, and science problems are well-defined problems with one clearly correct goal state" (p. 151). This would presumably limit the options of the teacher as a presenter of this material.

Finally, all students indicated that charismatic teaching (at least "good" charismatic teaching) had a salutary effect on their motivation.

The belief of some students that certain courses were more conducive to charismatic teaching suggests the question: Are courses which feature ill-defined problems different from courses which feature well-defined problems in the likelihood of students to perceive charismatic teaching? This question will be explored in part II.

Part II

Method--Testing Hypotheses

The questionaire developed in Part I was administered to 19 classes. The data thus collected were analysed in order to determine the internal consistency of the charismatic teaching measure. The data were submitted to a factor analysis in order to examine component factors of this measure. Statistical analyses were also carried out in order to test the hypotheses outlined below.

Hypotheses

The objectives of this study can be explicated in two sets of hypotheses. These may be listed as (1) the relationship of charismatic teaching behavior to teacher recognition, (2) variables related to students' perception of charismatic teaching.

Charismatic teaching and teacher recognition. The question of concern here is whether honorific recognition of teachers for teaching merit is related to their being perceived by students as charismatic teachers.

Hypothesis 1: Teachers who have been recognised for teaching merit are more likely to be perceived as charismatic than teachers who have not been so recognized ($\alpha = 0.05$)

Variables related to students' perception of charismatic teachers. Two issues are addressed in relation to students' perception of charismatic teaching. First, how are students' perceptions of charismatic teaching related to their other

responses to the teacher and the course, namely, their trust in the teacher and their commitment to the course?

Hypothesis 2: There is a positive relationship between charismatic teaching and expressed trust in the teacher.

Hypothesis 3: There is a positive relationship between charismatic teaching and expressed commitment to the class.

Second, how are students' perceptions of charismatic teaching related to other student and classroom variables such as student gender, teacher gender, student and teacher ethnic origin, and nature of the subject being taught?

Hypothesis 4: Teachers are more likely to be perceived as charismatic by students of the same gender.

Hypothesis 5: Teachers are more likely to be percieved as charismatic by students of the same ethnic origin.

Hypothesis 6: Teachers of subjects with ill-defined problems are more likely to be percieved as charismatic than teachers of subjects in which the problems are well-defined.

Subjects

Twenty four teachers, (12 recognized, 12 unrecognized) were selected from among all regular faculty in the college of arts and sciences at a large midwestern state university. The recognized teachers were selected first in the following manner: All faculty who were recognized by the university for teaching merit since 1985 were listed. Twelve teachers were randomly selected from among teachers who were listed as teaching courses

during the semester in which data were being collected. These teachers were then requested to have their classes surveyed. Teachers who did not accept were replaced, and another teacher added by random selection from the list. Ten teachers eventually participated. From the remaining (unrecognized) teachers, teachers were divided into subgroups of the disciplines represented by the first group. Twelve teachers were then randomly selected to represent each subgroup to match the first group. Nine teachers eventually participated.

Measures

1. Charismatic teaching was measured by the instrument developed in part I.

2. Trust. A work attitude measure of interpersonal trust at work was developed by Cook and Wall (1980). This scale was developed for assessing the trust workers in organizations have in their managers and their peers. Initial studies show coefficients of internal homogeneity (coefficient alpha) ranging from 0.80 to 0.85. This scale was adapted to measure trust of students in their teacher, rather than workers and management in their organization. This was done by changing words or terms. The intrinsic meaning of items in terms of their relation to trust remained intact.

3. Commitment. Mowday, Steers and Porter (1979) published a measure of organizational commitment intended to assess the strength of employees' identification with and involvement in

their work organization. Coefficent alpha reliabilities reported ranged from 0.82 to 0.93. An adaptation of this measure was made along lines similar to those used for the adaptation of the trust scale.

Procedure

A questionnaire was developed combining the measures of charismatic teaching, trust and commitment, as well as questions regarding personal information. This questionnaire was administered to one class at undergraduate level taught by each teacher selected.

Independent t-tests were performed to test the relationship between charismatic teaching and recognition. Multiple regression analyses were performed to determine the relationships between charismatic teaching, student trust and commitment, and the other variables in the hypotheses above.

Results and discussion

Reliability

As a test of reliability, Cronbach alpha was calculated for two classes. This resulted in reliability coefficients of 0.861 and 0.902 respectively. In addition, a class in which there was a high attrition showed a Cronbach alpha coefficient of 0.775. Cronbach alpha coefficient for all the complete responses (455 cases) was 0.930. Spearman-Brown coefficient was 0.950. Split-half correlation (odd-even) was 0.905.

Attributes of charismatic teaching - Factor analysis

The complete data set was factor analyzed using the principal components method described by Wilkinson (1990).[4] The analysis was subjected to a varimax rotation and factors were selected based on eigenvalues of 1.5 or higher. Table 1 shows the items which correspond to each factor with their rotated factor loadings. Based on the factor loadings of at least 0.400, the items on the questionnaire were separated to reflect three factors. These are shown in Tables 2, 3 and 4.

The factors shown on Tables 2, 3 and 4 suggest at least three different aspects of charismatic teaching as perceived by students. These may be labeled "personal empathy" for factor 1, "personal intensity" for factor 2, and "intellectual challenge" for factor 3.

An examination of the items loaded in each factor indicates that not all items loading on a factor were logically consistent with the way that factor is identified. Items were removed from Factor 1 and Factor 3 to make the factors more consistent. The items removed are marked by an asterisk (*). The factor analysis was then run once more without these items. The results of this analysis is shown in Tables 5, 6,and 7.

The factor analyses support the assertion that charismatic teaching may be separated into personal and intellectual components. More interestingly, however, the personal component is clearly separable into two quite distinct factors.

Charismatic teaching and teacher recognition.

The trust and commitment scales were administered along with the charismatic teaching questionnaire. Table 8 shows the average charisma, trust and commitment scores for recognized and unrecognized teachers. Table 9 shows the average scores on the three factors of charismatic teaching for each teacher. Hypothesis 1 was tested by means of a separate variances independent t-test.

As Table 10 indicates, this hypothesis was supported ($p < .05$), with recognized teachers having significantly higher scores on the charismatic teaching scale. A similar test of commitment and trust measures showed no significant differences between groups of teachers (see Tables 11 and 12).

The two groups were then compared on the separate factors of charismatic teaching. The results of these comparisons are shown in Tables 13, 14 and 15. Although in each case, recognized teachers scored higher on average than unrecognized teachers, t-tests (one-tail) of these comparisons show significant differences between groups for Personal Empathy ($p < 0.05$) and Intellectual Challenge ($p < 0.01$) but not for Personal Intensity ($p > 0.05$).

Students' perception of charismatic teachers

Hypotheses 2 and 3 were initially tested by a Pearson correlation analysis. The general charisma score was found to be highly correlated with scores on the trust ($r = 0.700$), and commitment ($r = 0.704$) scales. The three factors of charismatic teaching varied in the strength of their correlation with both trust and commitment. As Table 16 shows, Personal Empathy was most highly correlated with both trust and commitment, with Personal Intensity correlating less and Intellectual Challenge even less.

As a further test of hypotheses 2 and 3, the data were subjected to a multiple regression analysis. These hypotheses, and the supporting literature, suggest that a student's perception of charismatic teaching may result in increased levels of commitment and trust. In addition, other variables such as the nature of the subject, student's age and gender, teacher's gender, and an interaction of student's and teacher's gender may also influence the development of commitment and trust. These variables were also included in the regression models. Also, the three factors of charismatic teaching were included separately in the models. Since teachers in the sample were of the same ethnic origin, the predicted interaction could not be tested. Student ethnicity was used as a predictor instead. Based upon the assumption that charismatic behavior, as well as trust and commitment, are judgements by individual students (followers)

rather than necessarily determined by teacher (leader) behavior, the analysis was done using the total data set undifferentiated by teacher.

With trust as the dependent variable the following model was tested:

Trust = constant + empathy + intensity + challenge + subject + age + ethnicity of student + sex of student + sex of teacher + sex of student X sex of teacher.

The results of this analysis are shown in Tables 17 and 18. It shows that personal empathy is a significant predictor of trust (β-weight = 0.682, $p < 0.001$) but that the other two components of charismatic teaching are not significant predictors. Teacher sex was also shown significantly to be predictive of trust ($p = 0.054$), as was an interaction between student and teacher sex ($p = 0.056$). The β-weight of -0.202 indicates that male teachers were related to higher trust than female teachers. The significant interaction (β-weight = 0.252) between teacher sex and student sex suggests that higher trust was engendered in students by teachers of opposite sex.

A similar analysis was performed with commitment as the dependent variable, testing the following model:

Commitment = constant + empathy + intensity + challenge + subject + age + ethnicity of student + sex of student + sex of teacher +

sex of student X sex of teacher. The test of this model is shown in Tables 19 and 20.

The results of this analysis indicates that empathy (β-weight =0.585, $p < 0.001$) and intensity (β-weight =0.139, $p = 0.003$) are significant predictors of commitment. The subject was also found to be predictive, though marginally so (β-weight = -0.059). Hypotheses 4, 5, and 6 are based on the suggestion that ethnicity of the teacher, the gender of teacher and student and the nature of the subject being taught may influence the likelihood of the student perceiving charismatic teaching. In this analysis the general charismatic teaching scores were used. Trust and commitment were included in the model as well, since it was argued that the influence of these two dimensions was neither linear nor unidirectional. While charismatic teaching may cause trust and commitment, predispositional trust or commitment in the student may also influence a favorable perception of the teacher by the student. Therefore the following model was analysed:

Charisma = constant + commitment + trust + subject + age + ethnicity of student + sex of student + sex of teacher + sex of student X sex of teacher.

The results of this analysis are shown in Tables 21 and 22. These show a significant regression equation based upon the model. However, several of the variables were found not to be

significant predictors of charismatic teaching. In order to determine the best model, a stepwise regression analysis was performed. The final estimate is shown in Tables 23 and 24.

These analyses indicate that in this regression model, commitment and trust are significant predictors of charismatic teaching. However, ethnicity of student, the nature of the subject being taught, age of student, and sex of the student, were not significantly related in the regression model. Neither was there a significant interaction between teacher sex and student sex.

A stepwise regression analysis resulted in the selection of commitment, trust, and teacher sex as a subset of variables which best fit the regression equation. Wilkinson (1991) indicates that estimates of confidence of variables after this procedure are highly suspect. Thus it is not clear that teacher sex is significantly related to charismatic teaching.

Hypotheses 4, 5 and 6 all failed to be supported. However, there is evidence of a weak relationship between teacher sex and charismatic teaching, that is, that female teachers are more highly related to charismatic teaching than male teachers (β-weight = 0.064).

General discussion and conclusions

Attributes of charismatic teachers

The interviews of teachers and students produced a list of behavior characteristics. Of particular interest was the finding that charismatic teachers were perceived as exhibiting caring and concern for students, and were seen as energetic and enthusiastic in the classroom. The factor analysis buttresses this basic conclusion. This is consistent with the conclusions of Murray (1983), whose factor analysis of low inference classroom teaching behaviors showed the emergence of similar factors.

There are differences between Murray's and the present study. The most obvious is the use in the Murray study of low-inference behaviors obtained by observation of teachers. In the present study, the factors were derived from descriptions of behaviors by students and teachers and are largely high-inference behaviors. This difference notwithstanding, the similarity in the two studies supports the importance that Personal Empathy (caring, and concern) and Personal Intensity (enthusiasm) have been given for charismatic, if not also good, teaching. The third characteristic (Intellectual Challenge) may well be, in combination with the former two, the distinctive feature of charismatic teaching, which sets it apart from charisma in other areas such as organizational leadership.

Another factor found by Murray to be related to student ratings was Clarity. Here, the results of the present study are of interest. One of the teaching behaviors identified by Murray was "showing strong interest in the subject". This behavior was positively related to Clarity, but had been negatively related to Enthusiasm. In the present study, interviews suggest that there may be two opposing kinds of charismatic teaching, one focussed on intellectual aspects, the other on personal or relational attributes. The fact that "strong interest in the subject" is negatively related to Enthusiasm may support this notion. It suggests that, typically, the teacher who is given strong Enthusiasm ratings because his or her engaging manner is attractive to students will not at the same time (or by the same students) be noted for strong interest in the subject. The latter teachers may, nevertheless, also be identified as charismatic, at least by some students.

Charismatic teaching and teacher recognition

On the basis of the information gleaned by interviewing students and teachers, the questionnaire to measure charismatic teaching as articulated by those interviewed was developed. A question of concern in the present study was whether charismatic teaching was related to teacher recognition. This is reflected in Hypothesis 1. The primary question involved whether the traits identified by students and faculty as characteristics of

charismatic teachers were the ones they tended to put the most weight on when identifying teachers for merit. The results of this study show that teachers who had been recognized were significantly more charismatic, as measured by this instrument, than teachers who had not been recognized. This result is remarkable since some of the teachers presently classified as not recognized were sure to include those who in the future would be recognized but who had not yet been so formally identified. Included among these are teachers who had only recently joined the faculty, and had therefore not had the time to develop a reputation. This result indicates that charismatic teaching (again, as measured by the instrument developed for this study) is clearly related to teacher recognition.

A further analysis of this issue relates to whether the two groups of teachers differ in the individual components of charismatic teaching, that is, in Personal Empathy, Personal Intensity and Intellectual Challenge. Comparisons of the groups on these measures showed significant differences between groups in Personal Empathy and Intellectual Challenge, but not in Personal Intensity. These differences suggest that Personal Empathy and Intellectual Challenge may be more important in the selection of teachers to be recognized than Personal Intensity. This conclusion would be somewhat surprising, since the Personal Intensity factor includes the elements of enthusiasm

and excitement that are often assumed to be persuasive in the identification of outstanding teachers. The fact that Personal Intensity was not significantly higher in recognized than unrecognized teachers suggests that enthusiasm may not be an overriding factor in the selection of teachers to be recognized. Another explanation may be that the influence of factors other than student responses, in the selection of teachers to be recognized, may attenuate the effect of enthusiasm.

Another question of interest is whether the perception of charisma on the whole has so strong an influence in the selection of teachers for recognition, that otherwise excellent teachers are passed over in favor of teachers who are charismatic, but less competent. This question was not the basis of a hypothesis in this study, though it always lurked in the background for this researcher. It was raised more prominently during the interviews when the distinction of "good and bad kinds of charisma" or "charismatic teacher versus charlatan" were raised by both the teachers and the students who were interviewed.

The question remains since there is no evidence in this study that recognized teachers, though charismatic, were necessarily also the most competent, nor that unrecognized teachers, though less charismatic, were also less competent. The question remains also, in the light of research evidence (e.g. Williams and Ware, 1976) that teachers given the highest ratings

may not necessarily be the most competent, may not make content-rich presentations, and may not generate the most learning. Yet, in education at least, content and learning must surely be of fundamental importance.

Students' perception of charismatic teachers.

Trust and commitment. One of the reliable findings in the literature concerning charismatic leadership is its relationship to trust and commitment. A related question to the one dealt with above was whether the two groups would also show differences in these characteristics. This was not found to be the case.

It was important also to determine whether charisma as articulated by the interviewees and as measured by the instrument developed for this study also demonstrated this relationship. That was the focus of Hypotheses #2 and #3 of this study. It was postulated that charismatic teaching would be positively related both to trust and commitment on the part of students. The Pearson correlation matrix showed strong relationships between the Personal Empathy and Personal Intensity factors on the one hand, and both trust and commitment on the other. In each case the relationship with Intellectual Challenge was relatively weaker.

The regression analysis showed Personal Empathy to be strongly predictive of trust, by far the most highly predictive of all the variables in the regression equation. This is not

surprising, since trust would be expected to be developed in response to strong relational forces.

Personal Empathy was also highly predictive of commitment. Also predictive to a significant degree, though at a weaker level than Personal Empathy, was Personal Intensity (β-weight = 0.139, $p < 0.005$). Intellectual Challenge was not found to be significantly predictive of trust or commitment ($p > 0.10$). It is noteworthy that while Intellectual Challenge was significantly related to teacher recognition, it was not found to be significantly predictive of trust or commitment.

One likely explanation is that students do not tend readily to perceive intellectual challenge, or at least do not consider it an important factor in the teachers they trust or to whom they are committed. This is consistent with earlier findings (Coats & Smidgens, 1966; Williams & Ware, 1976) that students appear to neglect cognitive density in the presence of high expressiveness. On the other hand, the process of teacher recognition takes into account more than the students' evaluation of trust or loyalty. It includes as well other measures from other sources, including other faculty, which may more accurately reflect Intellectual Challenge.

This result generally supports the original formulation of House (1977) whose initial theory proposed that charismatic leadership has the effect of generating enthusiastic loyalty,

commitment, and devotion. Thus the factors of Personal Empathy and Personal Intensity together may be seen to have similar characteristics as the charismatic leadership described by House. The place of Intellectual Challenge as a part of this construct remains open to question. One answer may be that charismatic teaching is a concept different from, though related to charismatic leadership. This issue will be addressed further later.

This result also points to a potential value of charismatic teaching in the context of education. To the degree that the charisma being described here is "good charisma," in which content is being responsibly presented by a teacher along with the relational and energy characteristics previously identified, charismatic teaching is clearly an advantage. However, since the ability of students to judge content seem to be impaired in the presence of charismatic factors, the enhanced trust and commitment may also constitute a danger. It should also be noted that the trust and commitment was reported, not observed. A necessary further step in validating this result would be to determine whether actual classroom behavior corresponds with these reports.

Student, teacher and class variables. Hypotheses 5 ,6 and 7 posit that there is a relationship between the perception of charismatic teaching on the one hand, and gender of teacher and

student, ethnicity of teacher and student, and the nature of the subject being taught, on the other. There was no conclusive support for these hypotheses. However, there were some inherent limitations in the subject pool for this study which warrant that certain elements receive further examination.

Is there, therefore, no basis for the speculation, for example, that subject matter is related to the perception of charismatic teaching? In order to conclude that, it would be necessary to look beyond merely the labels of subjects to the ways in which those subjects are taught. An important difference between ill defined and well-defined problems is the amount of ambiguity inherent in those problems (see Glover, Ronning & Bruning, 1990, pp. 151 & 152). There is much evidence that the presence of ambiguity can be motivating (see, for example, Berlyne, 1966 and Piaget, 1977). Thus it might be that more important than the nature of the subject matter itself, is the nature of problem posing that the teacher introduces into the process of teaching. Further research is needed to test this line of reasoning.

Conclusions

The present research has attempted to explore the notion of charismatic leadership and the extent to which it may be perceived in the college classroom as charismatic teaching, to examine the nature of charismatic teaching as an independent

concept, and to uncover the factors related to its perception by students.

It can be concluded that charismatic teaching as a concept related to charismatic leadership is a viable notion. In addition, this research suggests that students perceive a number of factors in their charismatic teachers, principally, Personal Empathy, Personal Intensity and Intellectual Challenge. Since charismatic teaching is associated with high levels of motivation, this can be a useful characteristic for students to perceive in their teachers. Further, if, as House (1977) suggests, these are not personality characteristics, and that individuals may simply act "as though" they are charismatic, there is the possibility of cultivating these characteristics. This suggests that training of teachers in charismatic behaviors may be a viable proposition.

But there may also be inherent dangers in charismatic teaching. First, this study suggests that there may be an uneven influence of the three factors of charismatic teaching on the generation of trust and commitment. While Personal Empathy is clearly predictive of trust, and Personal Empathy and Personal Intensity are predictive of commitment, Intellectual Challenge is not highly predictive of either. Teachers who receive high ratings on Personal Empathy and Personal Intensity, but not on Intellectual Challenge, may generate high levels of trust and

commitment in their students, yet may be lacking in the cognitive content necessary for good teaching.

If, as has been suggested, high expressiveness tends to mask the effect of content, charismatic teaching can be a useful measure of good teaching only to the degree that Intellectual Challenge is a significant component of such measurement.

Second, although charismatic teaching shares important characteristics with charismatic leadership (notably the generation of trust and commitment in followers), the warning of Norr and Crittenden (1975) against a one-to-one correlation between teaching and leadership should be heeded. However, the distinction between the two need to be explored further.

Since the relationship of trust and commitment to charismatic leadership is clearly established, the question of the place of Intellectual Challenge as a component of charismatic teaching, and the relation of charismatic teaching to charismatic leadership must be addressed.

The evidence presented in this research leads to the conclusion that the quality that students and teachers commonly refer to as charismatic teaching includes Intellectual Challenge as one of its components. This quality is similar to, but not entirely coincident with charismatic leadership. The two are distinct concepts which share important features. Thus, there are elements of charismatic teaching which, like charismatic

leadership, are predictive of trust and commitment. The element of Intellectual Challenge seems to fall outside of this area of shared characteristics. Further articulation of the relationship between charismatic leadership and charismatic teaching can be a productive goal of further research.

In general, the present research suggests that charismatic teaching is a concept that college academic administrators and faculty development personnel should not ignore. Though it involves characteristics that are beneficial to the teaching process, charismatic teaching must be seen as separate from good teaching. Since charismatic teaching is primarily a student perception, student ratings are likely to reflect strong charismatic effects. Overt efforts need to be made to ensure that these effects do not mask other teacher behaviors which might have harmful effects on learning. At least, it is important that a large range of data sources be used in evaluating teachers and that student ratings not be the only or principal source of information on teacher effectiveness.

Notes

1. This paper is derived from a doctoral dissertation completed at Indiana University (1993). The author would like to gratefully acknowledge Dr. David Gliessman who directed the research, as well as Drs. Larry Brown, Myrtle Scott, Barbara Wolf, and Sam Guskin of the School of Education, and Phil Podsakoff of the School of Business, Indiana University, for their valuable contributions.

2. An extended argument on the appropriateness of applying charismatic leadership theory to the classroom and a comparison between the business and classroom environments can be found in the doctoral dissertation (Archer, 1993) from which this paper is derived.

3. In addition to the development of the questionnaire for measuring charisma, the interviews served as qualitative data to aid in understanding how college teachers perceive their charismatic peers, and how students perceive their charismatic teachers. These are reported elsewhere (Archer, 1993).

4. The factor analysis could presumably have been done using the teacher as the unit of analysis. However, the small number of teachers (N = 19) would have limited the covariance matrix. In order to have a larger number of "subjects", the raw ratings of students (N = 474) were used. A similar approach was used by Murray (1983). See also Linn, Centra, & Tucker (1975).

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TABLE 1.

ROTATED LOADINGS OF ITEMS ON CHARISMA SCALE (VARIMAX)

Item	Factors		
	1	2	3
CHARIS(28)	0.701	0.268	0.025
CHARIS(21)	0.692	0.162	0.139
CHARIS(19)	0.667	0.353	0.045
CHARIS(29)	0.648	0.354	0.199
CHARIS(27)	0.645	-0.010	0.118
CHARIS(13)	0.641	0.219	0.371
CHARIS(18)	0.638	0.106	0.206
CHARIS(2)	0.634	0.224	0.020
CHARIS(8)	0.628	0.278	0.204
CHARIS(12)	0.614	0.086	0.227
CHARIS(10)	0.594	0.343	0.141
CHARIS(24)	0.522	0.388	0.252
CHARIS(14)	0.389	0.742	0.118
CHARIS(16)	0.154	0.735	0.224
CHARIS(1)	0.394	0.714	0.040
CHARIS(5)	0.353	0.665	0.213
CHARIS(11)	0.178	0.617	0.222
CHARIS(30)	0.405	0.582	0.136
CHARIS(15)	-0.013	0.565	0.222
CHARIS(23)	0.013	0.043	0.724
CHARIS(7)	0.008	0.211	0.597
CHARIS(20)	0.405	-0.022	0.590
CHARIS(6)	0.220	0.132	0.582
CHARIS(25)	0.270	0.255	0.480
CHARIS(17)	0.175	0.214	0.447
CHARIS(22)	0.119	0.332	0.405
CHARIS(9)	0.440	0.385	0.222
CHARIS(26)	0.498	0.349	0.196
CHARIS(4)	0.427	0.344	0.162
CHARIS(3)	0.392	0.385	0.012

CUMULATIVE PERCENT OF TOTAL VARIANCE EXPLAINED

1	2	3
22.090	37.800	47.594

TABLE 2

ITEMS LOADING ON FACTOR 1

Item	Factor loading
28. Relates to students at their level.	0.701
21. Is very fair in dealing with students.	0.692
19. Uses examples that students can relate to.	0.667
29. Is concerned about students.	0.648
27. Is not defensive if proven wrong.	0.645*
13. Motivates students to try harder.	0.641
18. Is open to ideas other than his/her own.	0.638
2. Is willing to help whenever I need it.	0.634
8. Makes lectures relevant to students' experience.	0.628
12. Follows through with his/her commitments	0.614*
10. Is able to integrate the subject with other fields.	0.594*
24. His/her class is approached with great anticipation.	0.573
26. Uses a variety of examples.	0.498*
9. Is obviously an expert in his/her field.	0.440*
4. Shows great intellectual ability.	0.427*
30. Cares about the subject.	0.404*

* Items removed in later analyses due to lack of fit.

TABLE 3

ITEMS LOADING ON FACTOR 2

Item	Factor loading
14. Is energetic.	0.742
16. Exposes his/her personality to the class.	0.735
1. Demonstrates a sense of enjoyment in his/her teaching.	0.714
5. Arouses strong emotions about the subject.	0.665
11. Uses a lot of gestures in his/her teaching.	0.617
30. Cares about the subject.	0.582
15. Is wrapped up in his/her subject.	0.565

TABLE 4

ITEMS LOADING ON FACTOR 3

Item	Factor loading
23. Is a demanding teacher.	0.724
7. Has firmly held philosophical views.	0.597
20. Has high standards for success in class.	0.590
6. Confronts students, forcing them to come up with answers.	0.582
25. Usually knows the students' names.	0.480*
17. Usually wins people over to his/her viewpoint.	0.447
22. Moves about a lot in the room.	0.405*

* Items removed in later analyses due to lack of fit.

TABLE 5

ITEMS LOADING ON
PERSONAL EMPATHY FACTOR
AFTER REMOVAL OF ITEMS

Item	Factor loading
28. Relates to students at their level.	0.750
19. Uses examples that students can relate to.	0.710
21. Is very fair in dealing with students.	0.690
29. Is concerned about students.	0.684
13. Motivates students to try harder.	0.667
8. Makes lectures relevant to students' experience.	0.657
2. Is willing to help whenever I need it.	0.656
18. Is open to ideas other than his/her own.	0.615
24. His/her class is approached with anticipation.	0.545

Cronbach α = 0.883, Spearman-Brown coeff. = 0.896

TABLE 6

ITEMS LOADING ON
PERSONAL INTENSITY FACTOR
AFTER REMOVAL OF ITEMS

Item	Factor loading
16. Exposes his/her personality to the class.	0.757
14. Is energetic.	0.732
1. Demonstrates a sense of enjoyment in his/her teaching.	0.692
5. Arouses strong emotions about the subject.	0.649
15. Is wrapped up in his/her subject.	0.619
11. Uses a lot of gestures in his/her teaching.	0.572
30. Cares about the subject	0.553

Cronbach α = 0.852, Spearman-Brown coeff. = 0.889

TABLE 7

ITEMS LOADING ON
INTELLECTUAL CHALLENGE FACTOR
AFTER REMOVAL OF ITEMS

Item	Factor loading
23. Is a demanding teacher.	0.750
20. Has high standards for success in class.	0.644
6. Confronts students, forcing them to come up with answers.	0.589
7. Has firmly held philosophical views.	0.538
17. Usually wins people over to his/her viewpoint.	0.479

Cronbach α = 0.651, Spearman-Brown coeff. = 0.755.

TABLE 8

AVERAGE SCORES ON CHARISMA, TRUST AND COMMITMENT
FOR RECOGNIZED AND UNRECOGNIZED TEACHERS

Teacher	n of students	Recognition	Mean Charisma	Mean Trust	Mean Commitment
1	41	yes	5.951	6.188	5.182
2	15	yes	5.949	6.440	5.324
3	29	yes	5.962	6.690	5.800
4	16	yes	5.467	5.119	4.133
5	19	yes	5.756	6.121	5.115
6	38	yes	5.920	6.297	5.414
7	8	yes	6.142	6.650	5.942
8	18	yes	6.154	6.183	5.041
9	17	yes	5.273	5.920	5.103
10	14	yes	4.862	5.707	4.257
11	23	no	3.601	4.617	2.961
12	18	no	5.370	6.302	5.159
13	34	no	5.345	5.924	5.001
14	16	no	5.285	5.721	4.865
15	9	no	5.426	6.250	5.044
16	27	no	5.782	6.781	6.020
17	35	no	5.208	5.757	4.537
18	90	no	5.463	6.113	4.674
19	7	no	5.419	5.914	4.829

n of teachers = 19; N(total) of students = 474

TABLE 9

MEAN SCORES OF THREE FACTORS OF CHARISMATIC TEACHING FOR RECOGNIZED AND UNRECOGNIZED TEACHERS

TEACHER	RECOGNITION	FACTOR 1	FACTOR 2	FACTOR 3
1	yes	6.030	6.387	4.849
2	yes	6.148	6.229	4.773
3	yes	6.100	6.447	4.441
4	yes	5.313	6.071	5.150
5	yes	5.661	5.957	5.463
6	yes	5.738	6.229	5.316
7	yes	6.125	6.411	5.675
8	yes	6.142	6.381	5.878
9	yes	5.258	5.393	5.179
10	yes	4.865	4.827	4.157
11	no	3.507	3.062	3.539
12	no	5.142	5.413	5.033
13	no	5.327	5.994	4.494
14	no	4.993	6.259	4.115
15	no	5.173	6.286	4.622
16	no	6.181	5.878	4.711
17	no	5.121	5.596	4.846
18	no	5.644	6.097	4.560
19	no	5.683	5.592	4.371

TABLE 10
t-TEST FOR AVERAGE CHARISMATIC TEACHING SCORES BY TEACHER GROUPS

Group	N	Mean	SD
Recognized	10	5.774	0.417
Unrecognized	9	5.211	0.624

Separate variances t = 2.161, df = 13.7, p = 0.025 (one-tail)

TABLE 11

t-TEST FOR AVERAGE COMMITMENT SCORES BY TEACHER GROUPS

Group	N	Mean	SD
Recognized	10	4.831	1.137
Unrecognized	9	4.788	0.805

Separate variances t = 0.814, df = 16.2, p = 0.462 (one-tail)

TABLE 12

t-TEST FOR AVERAGE TRUST SCORES BY TEACHER GROUPS

Group	N	Mean	SD
Recognized	10	6.132	0.467
Unrecognized	9	5.931	0.591

Separate variances t = 0.814, df = 15.2, p = 0.214 (one-tail)

TABLE 13

t-TEST FOR AVERAGE PERSONAL EMPATHY SCORES BY TEACHER GROUPS

Group	N	Mean	SD
Recognized	10	5.738	0.457
Unrecognized	9	5.197	0.735

Separate variances t = 1.902, df = 13.1, p = 0.040 (one-tail)

TABLE 14

t-TEST FOR AVERAGE PERSONAL INTENSITY SCORES BY TEACHER GROUPS

Group	N	Mean	SD
Recognized	10	6.033	0.467
Unrecognized	9	5.575	0.991

Separate variances t = 1.238, df = 11.9, p = 0.120 (one-tail)

TABLE 15

t-TEST FOR INTELLECTUAL CHALLENGE SCORES BY TEACHER GROUPS

Group	N	Mean	SD
Recognized	10	5.088	0.539
Unrecognized	9	4.477	0.440

Separate variances t = 2.718, df = 16.9, p = 0.008 (one-tail)

TABLE 16

INTERCORRELATIONS OF THREE FACTORS OF CHARISMA, TRUST AND COMMITMENT SCORES

	Personal empathy	Personal intensity	Intell. challenge	Trust	Commitment
Pers. Emp	1.000				
Pers. Int	0.672	1.000			
Intel. Chall	0.482	0.461	1.000		
Trust	0.728	0.523	0.340	1.000	
Commitment	0.690	0.545	0.393	0.710	1.000

TABLE 17

MULTIPLE REGRESSION

Dependent var: Trust; N = 454; Multiple R = 0.733;
Multiple R^2 (adjusted) = 0.528

Variable	Coefficient	Std Error	Std Coef	T	P
Constant	2.644	0.360	0.000	7.336	0.000
Empathy	0.608	0.041	0.682	14.707	0.000
Intensity	0.056	0.043	0.060	1.305	0.193
Challenge	-0.028	0.036	-0.029	-0.761	0.447
Subject	0.049	0.061	0.027	0.808	0.419
Age	0.058	0.042	0.046	1.373	0.170
Ethnicity	-0.028	0.033	-0.028	-0.857	0.392
Stud.sex	-0.181	0.177	-0.101	-1.022	0.307
Teach.sex	-0.386	0.199	-0.202	-1.935	0.054
Stud. sex X Teach. sex	0.240	0.125	0.252	1.919	0.056

TABLE 18

ANALYSIS OF VARIANCE

Source	Sum-of Squares	Df	Mean-Square	F	P
Regression	196.690	9	21.854	57.285	0.000
Residual	169.387	444	0.384		

TABLE 19
MULTIPLE REGRESSION

Dependent var.:Commitment, N = 455, Multiple R = 0.721,
Multiple R^2 (adjusted) = 0.511

Variable	Coefficient	Std Error	Std Coef	T	P
Constant	0.595	0.449	0.000	1.326	0.186
Empathy	0.638	0.051	0.585	12.402	0.000
Intensity	0.159	0.054	0.139	2.952	0.003
Challenge	0.055	0.045	0.047	1.217	0.224
Subject	-0.130	0.076	-0.059	-1.709	0.088
Age	0.050	0.053	0.032	0.944	0.346
Ethnicity	0.017	0.041	0.014	0.422	0.673
Stud. sex	0.022	0.220	0.010	0.099	0.921
Teach. sex	-0.351	0.248	-0.150	-1.416	0.157
Stud. sex X stud. sex	0.055	0.155	0.047	0.352	0.725

TABLE 20

ANALYSIS OF VARIANCE

Source	Sum-of Squares	Df	Mean-Square	F	P
Regression	285.545	9	31.727	53.656	0.000
Residual	263.133	445	0.591		

TABLE 21

MULTIPLE REGRESSION

Dependent variable: charismatic teaching; N = 454; Multiple R = 0.765; Multiple R^2 (adjusted) = 0.577

Variable	Coefficient	Std Error	Std Coef	T	P
Constant	1.668	0.305	0.000	5.468	0.000
Comm	0.322	0.032	0.447	10.173	0.000
Trust	0.325	0.039	0.369	8.305	0.000
Stud. Sex	0.119	0.148	0.075	0.809	0.419
Teach. sex	0.261	0.166	0.155	1.573	0.116
Subject	-0.058	0.051	-0.036	-1.142	0.254
Ethnicity	-0.045	0.027	-0.051	-1.647	0.100
Age	0.027	0.035	0.024	0.771	0.441
Stud. sex X teach. sex	-0.082	0.105	-0.097	-0.782	0.435

TABLE 22

ANALYSIS OF VARIANCE

Source	Sum-of Squares	Df	Mean-Square	F	P
Regression	166.323	8	20.790	78.312	0.000
Residual	118.139	445	0.265		

TABLE 23

FORWARD STEPWISE REGRESSION ANALYSIS

Dependent variable: charismatic teaching; N = 471; Multiple R = 0.762; Multiple R^2 (adjusted) = 0.581

Variable	Coefficient	Std Error	Std Coef	T	P
Constant	1.723	0.172	0.000	10.040	0.000
Com'tment	0.313	0.031	0.430	10.020	0.000
Trust	0.345	0.038	0.391	9.094	0.000
Teacher sex	0.109	0.051	0.064	2.111	0.035

TABLE 24

ANALYSIS OF VARIANCE

Source	Sum-of Squares	Df	Mean-Square	F	P
Regression	173.975	3	57.992	215.935	0.000
Residual	125.418	467	0.269		